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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/933,056	08/20/2001	Christophe Person	LXGN-00103	6732
7590 05/03/2007 C. Steven McDaniel, Esq. McDaniel & Associates, P.C. P.O. Box 2244 Austin, TX 78768-2244			EXAMINER LY, CHEYNE D	
			ART UNIT 2168	PAPER NUMBER
			MAIL DATE 05/03/2007	DELIVERY MODE PAPER

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Office Action Summary

Application No.

09/933,056

Applicant(s)

PERSON, CHRISTOPHE

Examiner

Cheyne D. Ly

Art Unit

2168

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on June 08, 2006 & January 23, 2007.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 26 and 28-56 is/are pending in the application.
- 4a) Of the above claim(s) 31-41, 47-49, 52, 53, 55, and 56 is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 26, 28-30, 42-46, 50, 51 and 54 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 1.19(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
- ☐ Certified copies of the priority documents have been received.
 - ☐ Certified copies of the priority documents have been received in Application No. _____.
 - ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413) |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | Paper No(s)/Mail Date. _____ |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08) | 5) <input type="checkbox"/> Notice of Informal Patent Application |
| Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION

1. Applicants' arguments filed June 08, 2006, and amended claims filed January 23, 2007 have been fully considered but they are not deemed to be persuasive. Rejections and/or objections not reiterated from previous office actions are hereby withdrawn. The following rejections and/or objections are either reiterated or newly applied. They constitute the complete set presently being applied to the instant application.
2. Claims 26, 28-30, 42-46, 50, 51, and 54, species: Animal DNA/RNA; computer-readable encoding medium, GenBank public domain sequence database; and BLAST, are examined on the merits.

RESPONSE TO ARGUMENTS

3. The 35 U.S.C. 112, second paragraph, rejection directed to the limitations of "random short sequences" and "remembering the same" has been withdrawn as necessitated by claim amendments.
4. Specific to argument directed to the limitation of "identified unique sequences", Applicant's argument is not persuasive because Applicant's argument further supports the rejection. For example, Applicant argues that "comparing...he has identified as being of interest to his research..." which further supports the unique sequences have to be identified before said "identified unique sequences" can be used for the comparing step. It is further noted that the proposed amendment of "unique sequences of interest to the searcher" in the remark section would raise the new issue of lack of antecedent basis for the limitation "the searcher." Therefore, the suggested examiner's amendment by Applicant of "unique

Art Unit: 2168

sequences of interest to the searcher” has considered, however, not deemed to overcome the rejection of record.

5. The 35 U.S.C. 112, first paragraph, new rejection has been withdrawn.

6. The prior art rejection has been necessitated by the claim amendments, filed January 23, 2007, because the amendment has changed the scope of the claims.

CLAIM REJECTIONS - 35 U.S.C. § 112, SECOND PARAGRAPH

7. The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

8. Claims 26, 28-30, 42-46, 50, 51, and 54 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

9. Claim 26, lines 8 and 10, recites the limitation of “identified unique sequences,” there is insufficient antecedent basis for this limitation in the claim. Claim 26 does not identified the “identified unique sequences” for the comparison starting in line 6. Claims 28-30, 42-46, 50, 51, and 54 are rejected for being dependent from claim 26.

Claim Rejections - 35 USC § 102

10. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless --

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

11. Claims 26, 28-30, 42-46, 50, 51, and 54 are rejected under 35 U.S.C. 102(b) as being anticipated by Eckman et al. (1998) (Eckman hereafter).

SECONDARY SUPPORT

12. NCBI News provided in the previous Office Action, mailed September 08, 2003, has been cited not as prior art, but only to support that GenBank described by Eckman below inherently comprises redundant sequences (page 10, column 1, lines 26-28, especially, "GenBank...with a large degree of internal redundancy").

BASIS FOR PRIOR ART

13. In regard to claims 26 and 28-30, Eckman describes discloses a method for generating a database of sequences that are greater than or equal to about 100 nucleotides in length (page 5, column 2, Algorithm section, especially, "sequences must be at least 100 bp in length"), wherein each sequence is entered into the database only one time (page 7, column 1, lines 1-5), the method comprising the steps of:

Selecting a query sequence from a redundant database, said redundant database comprising random sequences of an information biomolecule (page 5, column 2, last line to page 6, column 1, line 3, especially, "any new EST data that appear in GenBank" which is well know to be a redundant database);

masking said query sequence with know repeat sequences to create a contig masked sequence query sequence capable of masking novel repetitive elements (page 10, column 2, last paragraph, especially, "ESTs containing repeat sequences...will undergo a repeat-masking step");

comparing said contig masked query sequence with identified unique sequences (page 7, column 1, lines 5-6, especially, "comparisons are performed using FastA");

identifying a unique portion of the query sequence with that does not have a similar sequence in any of the identified unique sequences and remembering said unique portion of the query sequence (page 7, column 1, lines 1-5, especially, “not equivalent to any existing index entry...not represented by any cDNA clone already in the index”);

adding the unique portion of the query sequence to a unique database (page 7, column 1, lines 11-13, especially, “results are loaded into the local MGI relational database” wherein the MGI database comprises “non-redundant set of clones and sequences each representing a distinct gene” (page 2, column 2 last paragraph, and page 3, column 1, The Merck Gene Index section); and

displaying the unique database (page 6, Figure 4, and page 7, Figure 5).

14. In regard to claims 42-46, Eckman discloses the GenBank (page 5, column 2, last line to page 6, column 1, line 3, especially, “any new EST data that appear in GenBank”).

15. In regard to claims 50, 51, and 54, Eckman discloses BLAST (page 3, column 2, Hardware and Software section, especially, “BLAST”, and page 8, column 1, last paragraph, “BLAST comparisons”). Specific to claim 54, the inclusion of Basic Local Alignment Search Tool (Altschul et al. provided in the previous Office Action, mailed September 08, 2003) is not used as prior art, but only to expand on the inherent feature of the BLAST program as discussed above. Altschul et al. discloses the use of a scoring matrix for the measuring of sequence similarities (page 404, column 1, lines 26-28), as in instant claim 54.

CONCLUSION

16. Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 706.07(a).

Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

17. A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the date of this final action.

18. Patent applicants with problems or questions regarding electronic images that can be viewed in the Patent Application Information Retrieval system (PAIR) can now contact the USPTO's Patent Electronic Business Center (Patent EBC) for assistance. Representatives are available to answer your questions daily from 6 am to midnight (EST). The toll free number is (866) 217-9197. When calling please have your application serial or patent number, the type of document you are having an image problem with, the number of pages and the specific nature of the problem. The Patent Electronic Business Center will notify applicants of the resolution of the problem within 5-7 business days. Applicants can also check PAIR to confirm that the problem has been corrected. The USPTO's Patent Electronic Business Center is a complete service center supporting all patent business on the Internet. The


Art Unit: 2168

USPTO's PAIR system provides Internet-based access to patent application status and history information. It also enables applicants to view the scanned images of their own application file folder(s) as well as general patent information available to the public.

19. For all other customer support, please call the USPTO Call Center (UCC) at 800-786-9199. The USPTO's official fax number is 571-272-8300.

20. Any inquiry concerning this communication or earlier communications from the examiner should be directed to C. Dune Ly, whose telephone number is (571) 272-0716. The examiner can normally be reached on Monday-Friday from 8 A.M. to 4 P.M.

21. If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Tim Vo, can be reached on (571) 272-3642.

C. Dune Ly / 
Patent Examiner
4/28/07